U.S. Army Corps of Engineers Support to the D&D Focus Area

Developer: Department of Army, USACE Huntington District
Contract Number: N/A
Crosscutting Area: N/A

Deactivation & Decommissioning FOCUS AREA

Problem:

The Deactivation and Decommissioning (D&D) Focus Area was established to develop and demonstrate improved technologies and systems that could solve customer-identified needs to characterize, deactivate, survey and maintain, decontaminate, dismantle, and dispose of or recycle Department of Energy (DOE) surplus facilities and their contents. The mission also includes facilitating the acceptance, approval, transfer, commercialization, deployment, and implementation of these technologies and systems. The use of a standard and widely accepted methodology for assessing cost and performance data and the validation of results is required to facilitate the D&D Focus Area mission.

Solution:

In June 1995, the Federal Energy Technology Center (FETC) and the Army executed an Interagency Agreement under which the Army provides engineering, construction management, economic modeling, and other technical support to FETC. Under authority of the agreement, the D&D Focus Area has requested assistance from the Army in demonstrating innovative technologies to characterize, decontaminate, dismantle, and dispose of surplus facilities, technical review of ongoing and potential future demonstrations, and in conducting life-cycle cost estimate comparisons of the innovative and baseline D&D technologies. These comparisons will determine the cost effectiveness of the innovative technologies. FETC's goal is demonstrate innovative technologies for repetitive and reliable use that will remediate 90% of the problems in the DOE's weapons complex.

Benefits:

- Checking the accuracy of the baseline cost estimates helps the DOE in its planning and funding process

- Developing methodologies for assessing impacts and cost savings of the innovative technologies assists in their widespread application across the nuclear weapons complex

- Independent validation of cost and performance results for innovative technologies provides for higher quality results at an increased level of credibility (or reliability)

Technology:

The U.S. Army Corps of Engineers (USACE) is assisting the D&D Focus Area in cost and performance evaluation of baseline and innovative technologies demonstrated in the Large Scale Demonstrations (LSDs), technical and management oversight of LSDs, evaluation and development of cost and performance information on innovative and baseline D&D technologies not demonstrated in a LSD, and development of life-cycle cost methodologies to estimate the costs of baseline and innovative technologies and approaches.

The role of the USACE in each LSD varies slightly based on the structure of the particular LSD. In general, for each LSD, the USACE in cooperation with the specific DOE field office, D&D Focus Area, and specific Integrating Contractor (IC) Team, shall participate in the evaluation of baseline and innovative technologies and manage any contractor(s) added to the IC team through procurements with the USACE. There are currently seven LSDs. The current LSD's supported

by USACE include: Chicago Pile 5 Test Reactor Decommissioning at Argonne National Laboratory, Plant 1 Complex Decommissioning at Fernald Environmental Management Project, C-Reactor Interim Safe Storage at Hanford, Los Alamos National Laboratory Oversize Metallic TRU Waste Disposition, Mound Tritium Facilities D&D, Savannah River Site 321-M HEU Fuel Fabrication Facility Deactivation, and Idaho National Engineering and Environmental Laboratory Fuel Storage Canals and Underwater and Underground Facilities D&D.

Depending on the LSD, the USACE may also provide assistance in the review of test plans and other appropriate documents to ensure that pertinent data quality objectives for each technology demonstration are identified, that appropriate data will be obtained during the demonstrations, and the data will be collected and recorded in an appropriate manner and frequency.

Contacts:

The USACE's Huntington District is the Army's Program Director for the agreement and is coordinating with, and brokering the work to, the appropriate Corps' offices across the United States. For more information, regarding this project, the contact is:

Principal Investigator:
Mr. Mark D. Kessinger
Department of Army, USACE
Huntington District
502 Eighth Street
Huntington, WV 25701-2070
Phone: (304) 529-5083
Fax: (304) 529-5715
E-mail:
markk@mail.orh.usace.army

DOE's Federal Energy Technology Center supports the Environmental Management - Office of Science and Technology by contracting the research and development of new technologies for waste site characterization and cleanup. For information regarding this project, the DOE contact is:

DOE Project Manager:
Mr. Steven J. Bossart
Federal Energy Technology Center
3610 Collins Ferry Road
P.O. Box 880
Morgantown, WV 26507-0880
Phone: (304) 285-4643
Fax: (304) 285-4403
E-mail: sbossa@fetc.doe.gov